

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/019077

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ B66B3/00, B66B1/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ B66B1/00-B66B3/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2005
Kokai Jitsuyo Shinan Koho	1971-2005	Toroku Jitsuyo Shinan Koho	1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2000-272850 A (Mitsubishi Electric Corp.), 03 October, 2000 (03.10.00), Claim 1; Par. Nos. [0028] to [0031]; Figs. 1, 4 (Family: none)	1-2, 4-5 3
Y A	JP 55-135075 A (Mitsubishi Electric Corp.), 21 October, 1980 (21.10.80), Claims; page 3, upper left column, line 8 to page 4, upper left column, line 2; Figs. 1 to 6 (Family: none)	1-2, 4-5 3
Y	JP 2000-219443 A (Mitsubishi Electric Corp.), 08 August, 2000 (08.08.00), Claim 1; Par. Nos. [0035] to [0038]; Figs. 1, 4 (Family: none)	2

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search
21 September, 2005 (21.09.05)Date of mailing of the international search report
11 October, 2005 (11.10.05)Name and mailing address of the ISA/
Japanese Patent Office

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 162434/1988 (Laid-open No. 83865/1990) (Hitachi, Ltd.), 28 June, 1990 (28.06.90), Claims; description, page 6, line 10 to page 7, line 9; Figs. 1 to 3 (Family: none)	5
A	JP 3-259880 A (Hitachi, Ltd.), 19 November, 1991 (19.11.91), Page 3, upper left column, line 13 to upper right column, line 11; Fig. 3 (Family: none)	3